7. Apparatus as claimed in claim 1 wherein the means for applying longitudinal tension to the facing sheet includes an adjustment mechanism connected to the spreader roller for varying the vertical position of the spreader roller and thus the amount the facing sheet is depressed onto said table gap.

8. Apparatus as claimed in claim 7 wherein the means for applying longitudinal tension to the facing sheet further includes conveyor means located downstream of the table for pulling the gypsum board from the table at a predetermined speed.

9. Apparatus as claimed in claim 1 and further comprising means for adjusting the viscosity of the coating slurry.

10. A method of manufacturing gypsum board having at least one facing sheet, a core layer of cementitious material, and an intermediate layer of bond promoting material located therebetween, the method comprising the steps of:

providing a forming table having an upstream portion, a downstream portion and a gap therebetween;

moving a facing sheet at a predetermined speed over the forming table passing over said gap;

depositing bond promoting material on the facing sheet on the upstream portion of the forming table;

providing a co-rotating spreader roller in contact with the facing sheet to spread the bond promoting material over the facing sheet, the spreader roller extending into said gap;

tensioning the facing sheet so that said tension urges the facing sheet against the spreader roller, said tension controlling the pressure of the facing sheet against the spreader roller, there being nothing under the facing sheet to press the facing sheet into engagement with the spreader roller; and

applying a core layer of cementitious material on top of the bond promoting material on the downstream portion of the forming table.

11. A method as claimed in claim 10 wherein the core layer material is low density gypsum slurry and the bond promoting layer is high density gypsum slurry.

12. A method as claimed in claim 11 wherein the rotational speed of the spreader roller is increased and decreased within a predetermined range to respectively increase and decrease the minimum thickness of the high density gypsum layer.

13. A method as claimed in claim 12 and wherein the facing sheet tension is increased and decreased within a predetermined range thereby tending respectively to decrease and increase the minimum thickness of the high density gypsum layer.

14. A method as claimed in claim 13 and further comprising the step of increasing and decreasing the viscosity of the high density gypsum within a predetermined range thereby tending respectively to increase and decrease the minimum thickness of the high density gypsum layer.

15. A method as claimed in claim 14 and further comprising the step of selecting the spreader roller speed, facing sheet tension and high density gypsum viscosity to produce a predetermined high density gypsum layer minimum thickness and prevent the high density gypsum from building up on the coating roller.

16. A method as claimed in claim 13 and further comprising the step of setting the spreader roller speed at a predetermined speed and adjusting the facing sheet tension sufficiently high to prevent high density gypsum from building up on the spreader roller.

17. A method as claimed in claim 13 and further comprising the step of setting the facing sheet tension at a predetermined tension and adjusting the spreader roller speed sufficiently high to prevent the high density gypsum from building up on the spreader roller.

18. A method as claimed in claim 13 wherein more high density gypsum is deposited onto the facing sheet than is formed into said high density gypsum layer, and further comprising the steps of adjusting the spreader roller speed and facing sheet tension such that some of the high density gypsum flows around the ends of the spreading roller to form high density edges on the gypsum board.

19. A method as claimed in claim 11 wherein the facing sheet tension is increased and decreased within a predetermined range to respectively decrease and increase the minimum thickness of the high density gypsum layer.

20. A method as claimed in claim 11 and further comprising the step of increasing and decreasing the viscosity of the high density gypsum within a predetermined range to respectively increase and decrease the minimum thickness of the high density gypsum layer.

* * * * *